

Multicultural strip comic as a learning media to improve the caring character in primary school

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ABSTRACT

This research of development aims to produce eligible media and test the effectiveness of multicultural strip comic to improve the caring character of primary school students. It referred to the 10 steps of Borg and Gall. This research was held on fourth-grade students at five primary schools in Gondokusuman District, Yogyakarta. It consisted of 9 students at the preliminary field testing, 36 students at the main field testing and 62 students at the operational field testing which were divided into two groups, namely experiment class and control class. The technique of data collection involved interviews, observation, scales, and questionnaires. The expert rating scale and the response questionnaire were used to determine the feasibility of the media. The effectiveness of the media was analyzed by the N-Gain score and t-test with a significance level of 0.05. The result showed that multicultural strip comic media is feasible and effective to improve caring character. This is seen from the N-Gain score and the result of the t-test which obtained a significance value of 0.000 ($p \leq 0.05$) which means it can improve the caring character of primary school students.

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1. INTRODUCTION

The 21st century makes the development of technology and communication more rapidly resulting in globalization. Globalization began in the 19th century and increasingly developed because of technology and communication in the 20th century. Until now, the development of communication can not be dammed. So that it greatly affects the lives of people in various parts of the world. The many uses of technology and communication are one of the characteristics of 21-st century globalization, it has an impact on social life such as the development of individual attitudes towards society [1]. One of the 21-st century skills that must be possessed by individuals besides thinking the high level is communication [2]. The increasing attitude of individuals in the 21st century is one of the effects of globalization which affects social communication. Good social communication will be created if individuals have a good character, so education in schools requires learning that can solve 21-st century problems by teaching good character for students [3].

Primary education is the basic preparation for creating a society that has 21-st century skills. Teachers need to utilize modern technology in creating meaningful communication for students [4]. Character education is a deliberate effort by educators in schools to instill virtue values in each individual to be applied in society [5]. There are three reasons why schools should be involved in character education: (1) we need a good character to be fully human, (2) the school is a conducive place for teaching and learning good characters, and (3) the importance of character education today to build morale in society [6]. According to Kemendiknas states there are 18 character values in the world of education, namely religious,

honest, tolerance, discipline, hard work, creative, independent, democratic, curiosity, national spirit, love of country, respect for achievement, communicative, love for peace, love to read, care about the environment, caring and responsibility. So based on these character values, caring is one of the characters that must be taught to solve the problems that arise in the 21st century.

Diminished caring can be seen from the attitude of individualism in society. The role of social media, media that display pillage, violence, and riots are examples of public anti-social that occur [7]. Besides, the dissemination of information through social media is increasingly widespread and causes many social conflicts nuanced SARA that can easily ignite people's emotions. So that cause many conflicts that arise due to differences. We can see that increasing globalization must consider the principle of multiculturalism as a major need in teaching the national education system [8]. Multicultural education is teaching that teaches awareness about differences. Bank states that education which upholds the principle of unity in diversity is said to be multicultural education [9].

The education system should teach citizens to live in diversity because with a multicultural education system can teach cognitive abilities and competitive values to individuals to be able to blend with a diverse society [10]. Multicultural must be integrated into the education curriculum by giving teachers an understanding that multicultural education is important to be understood by students when the learning process in the class, so that it can foster positive behavior in the social environment [11]. Multicultural education facilitates quality interaction between individuals who present various ideas and perspectives to choose the right steps in solving problems in diverse social lives [12].

Anti-social problems and the emergence of social conflicts nuanced SARA in the society requires the teaching of caring character education and awareness of differences and diversity in schools. Creating multicultural media is a strategy that can have a high effect on multicultural teaching in schools. Because the media created can provide assignments and discussions about diversity thus having a high impact on students thinking about living caring for others in diversity [13]. Whereas learning for the caring character can be done by teachers through literary character education strategies. Literary character education strategies that include moral teaching are effective ways to develop moral capacity in students [14].

Book is one of the positive literary works to lead students to read material on multiculturalism [15]. So the book learning media will make it easier for teachers to teach sensitivity to diversity in the classroom. Elementary school students have an interest in interesting learning media. Media filled with images will be able to attract the attention of students. The more illustrations, the more interesting it is for students and easier to understand because the presence of illustrations can facilitate student understanding [16]. Comics are a type of literary work that is filled with images and text. Comics are fun reading because it conveys information through aesthetics so that children are attracted to media that consists of images and text but contains messages conveyed [17]. The use of comics as a learning medium serves to increase understanding and maintain the reader's attention because it is communicative [18]. Strip comics as a type of comics have an advantage in the learning process that is fun and motivates students, the appearance of picture panels can express ideas briefly and simply [19]. So that the comic strip can be used as one of the media for character education in primary school. The character education program in the curriculum was found to have a positive effect on character development and academic achievement, character education regulates individual behavior according to human values with the aim of training individuals to succeed academically and socially [20]. Creating multicultural education in the classroom by inserting sensitivity to diversity in the learning process can also have a positive behavioral impact on students about multicultural understanding [21]. So that the development of strip comic media which is realized in books, made base on multiculturalism will be able to be beneficial for increasing the character and awareness of primary school students about diversity.

Considering the importance of caring character education in the current era of globalization as one of the characters that must exist in society and awareness of diversity, so we need an interesting media for teaching character education in schools. Comic strips combine text and visual representations that help children develop their thinking skills to understanding the story [22]. Comic strip stories that contain moral and social values can shape student characters because they are simple and interesting for students to read [23]. Multicultural strip comic as one of the literary works and interesting media for primary students, it can be developed as an effort to improve the caring character in primary school. Comic strip media that contain a collection of stories by promoting unity in diversity can raise awareness about diversity and it can improve the caring character in primary school as one of the solutions in the 21-st century.

2. RESEARCH METHOD

This research was held in Yogyakarta, Gondokusuman district in February until April 2018/2019. Research subjects are grade fourth students of primary school. This research was held in five schools. There are 9 students in the preliminary field testing, 36 students in the main field testing and 62 students

in the operational field testing which were divided into two classes, namely the experiment class and the control class.

This research and development use Borg and Gall design which have two purposes for developing products and to examine the effectiveness of the product. The technique of data collection involved interviews, observation, media expert scale, material expert scale, and response questionnaires. Qualitative data were obtained from the results of interviews and observations as a preliminary study and quantitative data were gained from material expert scale, media expert scale, response questionnaires and observation sheet of caring character. Qualitative data use descriptive analysis and quantitative data to use inferential statistics. Quantitative data analyzed using this formula below:

$$X = \frac{\sum x}{n} \quad [24]$$

Description :

\bar{X} = average score

$\sum x$ = total score

n = total number

After calculating the average score, scores are converted to five scale using the formula reference from Widoyoko [25] to obtain the criteria presented in Table 1.

Table 1. Conversion formula of quantitative data [25]

Formula	Score	Criteria
$X > X_i + 1,8 S_{bi}$	A	Very Good
$X_i + 0,6 S_{bi} < X \leq X_i + 1,8 S_{bi}$	B	Good
$X_i - 0,6 S_{bi} < X \leq X_i + 0,6 S_{bi}$	C	Good Enough
$X_i - 1,8 S_{bi} < X \leq X_i - 0,6 S_{bi}$	D	Less
$X \leq X_i - 1,8 S_{bi}$	E	Very Less

Description:

X_i = Mean ideal score = $\frac{1}{2}$ (maximum score + minimum score)

S_{bi} = Ideal standar deviation = $\frac{1}{6}$ (maximum score – minimum score)

X = Score

For the effectiveness of multicultural strip comic to improve caring character seen from the N-Gain and t-test result. N-gain ≥ 0.7 obtains high criteria, $0.7 > N\text{-gain} \geq 0.3$ obtains medium criteria and $N\text{-gain} < 0.3$ obtains low criteria. N-gain is calculated using this formula :

$$\text{Std gain } \langle g \rangle = \frac{X_{\text{posttest}} - X_{\text{pretest}}}{X - X_{\text{pretest}}}$$

Description :

X_{posttest} = Posttest mean value

X_{pretest} = Pretest mean value

X = Maximum value

3. RESULTS AND ANALYSIS

Based on the results of the research that has been held on fourth-grade students of primary school in Gondokusuman District are the validity and effectiveness of multicultural strip to improve caring character students. After making a comic strip, it checked by expert. Validation is done to obtain suggestions, comments that are used to improve the developed comic strip. Conversion results from the total effectiveness score by an expert can be said feasible if at least included in the “feasible” criteria with score 57 until 68. The results of material expert validation can be seen in the following on Table 2.

Table 2. The results of material expert validation

No	Aspect	Score
1	Material eligibility	41
2	Material language	16
3	Scope of material	20
	Total score	77
	Criteria	Very Feasible

Based on Table 2, the total score of material expert validation is 77. Material expert validation has feasible criteria if the minimum score is 56.1. So that, the total score criteria of material expert validation are “very feasible”. Then the validation is done by media expert, the conversion of the total validation score of the media expert can be said feasible if it is at least in the “feasible” criteria with score 61.7 until 74.8. The results of media expert validation can be seen in the following on Table 3.

Table 3. The results of media expert validation

No	Aspek	Score
1	Display of media	44
2	Content of media	29
3	Advantages of media	8
	Total score	81
	Criteria	Very Feasible

Based on Table 3, the total score of media expert validation is 81. Media expert validation has feasible criteria if the minimum score is 61,7. So that, the total score criteria of media expert validation is “very feasible”.

After the strip comic is validated by an expert, it is through a questionnaire response by the teachers and the students to find out their response about multicultural strip comic. Before it is tested on students in operational field testing. Preliminary field testing was held on 3 teachers and 9 students in SD N Sagan. Main field testing was held on 6 teachers and 36 students in SD N Serayu and SD N Terban Sari. This following Table 4 of questionnaire response by teachers and students.

Table 4. Preliminary field testing

No	Aspect	Questionnaire	
		Teacher questionnaire	Student questionnaire
1	Display of strip comic	79	52
2	Content of strip comic	98	36
3	Advantages of strip comic	95	45
	Total score	272	133
	Criteria	Feasible	Very Feasible

Based on Table 4, the total score obtained from the teacher response questionnaire is 272 with “Feasible” criteria. And the total score obtained from the student response questionnaire is 133 with “Very Feasible” criteria. Therefore in preliminary field testing can be concluded that multicultural strip comic can be used in the learning process but there are some suggestions for revision. After revision, the main field testing was held. This following Table 5. of questionnaire response by teachers and students in main field testing.

Table 5. Main field testing

No	Aspect	Questionnaire	
		Teacher questionnaire	Student questionnaire
1	Display of strip comic	201	204
2	Content of strip comic	217	131
3	Advantages of strip comic	190	177
	Total score	608	512
	Criteria	Very Feasible	Very Feasible

Based on Table 5, the total score obtained from the teacher response questionnaire is 608 with "Very Feasible" criteria. And the total score obtained from the student response questionnaire is 512 with "Very Feasible" criteria. Therefore in main field testing can be concluded that multicultural strip comic can be used in the learning process and it can be used for operational field testing.

Operational field testing involves two experiment classes and one control class. The first experiment class was held for 22 students in SD N Demangan, the second experiment class was held for 20 students in SD N Serayu and the control class was held for 20 students in SD N Baciro. Experiment class is classes that use multicultural strip comic when the learning process, and control class is class that do not use multicultural strip comic when the learning process. This following N-Gain results of caring character observation in operational field testing can be seen in the following on Table 6.

Table 6. N-gain results on operational field testing

Class	Average value		N-Gain	Criteria
	Pre-observation	Post-observation		
Y	47.50	49.20	0.03	Low
X ₁	47.50	70.90	0.40	Medium
X ₂	47.70	70.50	0.40	Medium

Description: Y = control class, X₁ = experiment class 1, X₂ = experiment class 2

Based on Table 6, character observation is a caring character assessment. The assessment consists of pre-observation and post-observation. Pre-observation is carried out before using the media, and post-observation is carried out after using the media. The character observation was carried out in experiment class and the control class. Based on character observation, the average increase in experiment class higher than the control class. Value of the average increase in the first experiment class is 23,4 with 0,40 gain score. Value of the average increase in the second experiment class is 22,8 with 0,40 gain score. So, it can be concluded that caring character in the experiment class can be improved with significant from the control class. Besides N-Gain results, the t-test was also carried out with the SPSS program. This following t-test result in caring character assessment on operational field testing can be seen in the following on Table 7.

Table 7. T-test results on operational field testing

Observation	Class	df	Sig.(p)	Finding
Pre-observation	X ₁ & Y	38	1.000	H ₀ accepted
	X ₂ & Y	40	0.954	H ₀ accepted
Post-observation	X ₁ & Y	38	0.000	H ₀ declined
	X ₂ & Y	40	0.000	H ₀ declined

Description: Y = control class, X₁ = experiment class 1, X₂ = experiment class 2

Based on Table 7, pre-observation shows that Sig. (p) more than 0.05 and H₀ accepted. This means that there are no significant differences in caring character between students who use and do not use multicultural strip comics. Post-observation shows that H₀ declined. This means that there are significant differences in caring character between students who use and do not use multicultural strip comics.

In this operational field testing, the result of the N-Gain and t-test show that multicultural strip comic can improve caring character in experiment class. So that, multicultural strip comic can improve caring character in primary school.

4. CONCLUSION

Based on the results of research and development studies that have been carried out in Gondokusuman District, it can be concluded that multicultural strip comic is used as one of the feasible and effective learning media to improve the caring character of fourth grade students in the primary school.

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